

ABSTRACT OF THE DISCLOSURE

Wastewater treatment systems and processes for removal of solids, pathogens, nitrogen, and phosphorus from municipal and agricultural wastewater include nitrification of wastewater and increasing the pH of the nitrified wastewater by adding a metallic-containing salt and hydroxide to precipitate phosphorus to form a useable effluent having a specified nitrogen:phosphorus ratio that is useful as a fertilizer or spray for remediation of contaminated soils. The presence of infectious microorganism such as enteropathogenic bacteria and picarnoviruses will be reduced in the useable effluent. The precipitated phosphorus is recovered and used to form useable phosphorus products.